

PR#9833

ZHANG, HAILIN

1/16/2008

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1 IN THE UNITED STATES DISTRICT COURT
2 FOR THE NORTHERN DISTRICT OF OKLAHOMA

3 STATE OF OKLAHOMA, ex rel.
4 W. A. DREW EDMONDSON, in his
5 capacity as ATTORNEY GENERAL
6 OF THE STATE OF OKLAHOMA and
7 OKLAHOMA SECRETARY OF THE
8 ENVIRONMENT C. MILES TOLBERT,
9 in his capacity as the TURSTEE
10 FOR NATURAL RESOURCES FOR
11 THE STATE OF OKLAHOMA,

12 Plaintiffs,

13 vs.

05-CV-0329 GKF-SAJ

14 TYSON FOODS, INC., TYSON
15 POULTRY, INC., TYSON CHICKEN,
16 INC., COBB-VANTRESS, INC.,
17 AVIAGEN, INC., CAL-MAINE FOODS,
18 INC., CAL-MAINE FARMS, INC.,
19 CARGILL, INC., CARGILL TURKEY
20 PRODUCTION, LLC, GEORGE'S, INC.,
21 GEORGE'S FARMS, INC., PETERSON
22 FARMS, INC., SIMMONS FOODS, INC.,
23 and WILLOW BROOK FOODS, INC.,

24 Defendants.

25 VIDEO DEPOSITION OF HAILIN ZHANG, Ph.D.
TAKEN ON BEHALF OF THE DEFENDANTS
JANUARY 16, 2008, BEGINNING AT 9:00 A.M.
IN OKLAHOMA CITY, OKLAHOMA

REPORTED BY: Laura L. Robertson, CSR, RPR

EXHIBIT

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1 WHEREUPON,

2 HAILIN ZHANG, Ph.D.,

3 after having been first duly sworn, deposes and says
4 in reply to the questions propounded as follows,
5 to-wit:

6 BY MR. GRAVES:

7 Q. Would you state --

8 MR. NANCE: We might want to reflect that
9 Mr. Sanders has joined us.

10 MR. SANDERS: Yes, after being lost for 45
11 minutes.

12 MR. GRAVES: Do you want to announce your
13 presence for the record, Bob?

14 MR. SANDERS: Bob Sanders for Cal-Maine
15 Foods.

16 Q. (BY MR. GRAVES) Would you state your name?

17 A. Hailin Zhang.

18 Q. Can you spell that for the court reporter?

19 A. First name, H-a-i-l-i-n, last name
20 Z-h-a-n-g, Zhang.

21 Q. Who is presently your employer?

22 A. Oklahoma State University.

23 Q. And what is your position there?

24 A. Professor of Soil Science.

25 Q. And Dr. Zhang, have you ever given a

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1 MR. NANCE: I don't remember whether it was
2 before or after the mediation process. But I wanted
3 the record to reflect that although it is privileged,
4 I have been there more than once. I just didn't want
5 you to have the impression that it was just last week.

6 THE WITNESS: It is at least three years
7 ago, I checked my calendar.

8 MR. GRAVES: I think my actual question was
9 in preparation for the deposition.

10 MR. NANCE: I thought you asked about longer
11 term contact.

12 MR. GRAVES: Okay.

13 MR. NANCE: So I just wanted to clear that
14 up.

15 Q. (BY MR. NANCE) Doctor, you talked with
16 several of the examining counsel about the role of
17 STP65. What is the significance of STP65 when it
18 comes to the growth response of plants?

19 A. Well, as the soil test P increases from zero
20 to 65, the response of plants to additional
21 phosphorous fertilizers diminishes. When you're at 65
22 or higher, you almost have no agronomic benefit, that
23 means no yield increase by applying additional
24 fertilizer. So that's why we do not recommend any
25 phosphorous when soil test reaches that point.

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1 Q. Okay. Based upon your knowledge of the lay
2 of the land in the Illinois River Watershed, would
3 most of the fields in that watershed have runoff if
4 there were a large enough rain?

5 MR. GRAVES: Object to the form.

6 Q. (BY MR. NANCE) That's like I did before.
7 You can go ahead and answer.

8 A. Yes, in the intensive rain.

9 Q. Okay. If the water in the Illinois River
10 Watershed is already impaired for phosphorous, is
11 there any point in putting more phosphorous in that
12 water?

13 MR. GRAVES: Object to the form.

14 THE WITNESS: If the fields are deficient in
15 phosphorous, there is agronomic reason to apply some.

16 Q. (BY MR. NANCE) Okay.

17 A. But when the soil test P rich is 100 percent
18 sufficiency level, then the benefits of applying is
19 not there anymore.

20 Q. Okay. And does poultry litter contain water
21 soluble phosphorous?

22 A. Yes.

23 Q. And in order to be any benefit to plants,
24 must that water soluble phosphorous that's laid on top
25 of the land somehow mix with water and sink down to